

32692

Customer Number

Patent
Case No.: 59004US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: E. Scott Hagermoser et al.

Examiner: Moon, Seokyun

Serial No.: 10/658,490

Group Art Unit: 2629

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

REPLY BRIEF TO EXAMINER'S ANSWER

**Mail Stop Appeal Brief –
Patents**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING OR TRANSMISSION

[37 CFR § 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
- ☒ transmitted to United States Patent and Trademark Office on the date shown below via the Office electronic filing system

Date: May 1, 2009 Signed by: /Nick Baumann/

Reply Brief Under 37 C.F.R. § 41.41

This Reply Brief is in response to the Examiner's Answer mailed March 9, 2009 and supports the Notice of Appeal filed on November 17, 2008. The Appeal Brief filed on December 2, 2008 appealed the final rejections of claims 1-7, 9-16, and 23-40 of the above-identified application.

The U.S. Patent and Trademark Office is hereby authorized to charge required fees or credits due to Deposit Account No. 50-0471 at any time during the pendency of this application.

Reply Brief to Examiner's Answer

Applicant: E. Scott Hagermoser et al.

Serial No.: 10/658,490

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

ARGUMENT

All arguments presented in the Appeal Brief filed on December 2, 2008 for this matter are incorporated by reference into this Reply Brief. This Reply Brief does not include any new or non-admitted amendment, new or non-admitted affidavit, or other new evidence.

The Examiner's thorough review of the Appeal Brief filed on December 2, 2008 and the statements made at page 2 of the Examiner's Answer confirming compliance of the Appeal Brief with the Rules are noted with appreciation.

I. The reasoning stated in the Examiner's Answer at page 4 is in error.

The Examiner has rejected independent claims 1 and 28 under 35 U.S.C. § 103 over Gillespie in view of Pryor and further in view of Neuman.

Independent claim 1 recites in part: a capacitive touch sensor disposed between an airbag and an airbag cover.

Independent claim 28 recites in part: a capacitive touch sensor disposed behind a surface in the vehicle that is accessible and touchable by an occupant in the vehicle, the touch sensor disposed in a manner such that the presence of the touch sensor maintains the look, feel, and functionality of the surface as if the touch sensor was excluded.

The Examiner's position is that Gillespie as modified by Pryor results in a capacitive touch sensor being disposed behind an airbag cover. Appellant disagrees.

Gillespie is cited as disclosing a capacitive touch sensor. Pryor discloses in the Abstract tactile touch screens and displays that use direct **optical** data input, and discloses at length the use of cameras and projectors (*See* as one example Figure 1c and column 15, lines 28-34).

Modifying Gillespie in view of the disclosure of Pryor does not result in a capacitive touch sensor being disposed behind an airbag cover, for at least the following reasons.

First, the Examiner's position stated at page 4 of the Examiner's Answer is that Gillespie as modified by Pryor discloses "the capacitive sensor behind an airbag cover (note that since, in the combination of Gillespie and Pryor, the '*insulating layer 36*' is the most front surface of the steering wheel and the airbag is included in the steering wheel, the '*insulating layer 36*' is a part of the airbag cover, which is an airbag surface)." (Emphasis in the original). It is believed that

Reply Brief to Examiner's Answer

Applicant: E. Scott Hagermoser et al.

Serial No.: 10/658,490

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

the logic of the quoted rationale is errant. Gillespie is silent as regards steering wheels or airbags. Pryor teaches away from placement of a sensor near an airbag and offers “requirements” at column 4, lines 57-59 that the display/touch screen must not be where the airbag is, or (as stated by Pryor) the airbag/and screen module must be of another design – and the one design disclosed at column 27 (Figure 4) shows a screen 430 that is exposed and made available for touching with a pen 479. Thus, one of ordinary skill in the art would not view Gillespie as modified by Pryor as disclosing “the capacitive sensor behind an airbag cover” as purported by the Examiner, but would be compelled to view Gillespie as modified by Pryor as disclosing exposed (uncovered) touch screens.

Second, Appellants’ position is that Pryor includes an explicit disclosure that categorically teaches away from placement of any sensor/touch screen “where the airbag is.” For example, Pryor explicitly states at column 4, lines 57-59 that some “requirements” of an automobile display/touch screen include: 7. “not sacrifice airbag function-thus must not be where the airbag is, or the airbag/and screen module must be of another design (one of which is disclosed herein).”

Consequently, when Pryor is read in its entirety, the conclusion is compelled that none of the cited references could be modified by Pryor to result in a capacitive touch sensor being disposed behind an airbag cover.

In particular, the Examiner’s position stated at page 13 of the Examiner’s Answer is that the Appellants’ position stated in the Appeal Brief at page 9 fails to rebut whether the combination of the references will result in a touch sensor disposed behind an airbag cover. If not already crystal clear in the Appeal Brief, Appellant’s position has consistently been that Pryor teaches away from locating a touch sensor or any other device “where the airbag is.”

Pryor states at column 4, line 58 that the touch screen must not be where the airbag is, or the airbag and touch screen must be of another design, “one of which is disclosed herein.” The “one” design disclosed by Pryor is set forth in column 27 with reference to Figure 4. Figure 4 illustrates “the point 479 of an ordinary pen” that is provided for drawing on screen 430 (column 27, lines 36-42). Consequently, the “one” design provided by Pryor that relates to placement near an airbag clearly exposes the screen 430 for input from a pen. Conclusively, then, the one

Reply Brief to Examiner's Answer

Applicant: E. Scott Hagermoser et al.

Serial No.: 10/658,490

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

and only example provided by Pryor of a touch screen located where an airbag is provides an exposed touch screen that receives input from a pen 479. Therefore, none of the cited references in combination with Pryor render obvious a capacitive touch sensor disposed between an airbag and an airbag cover, as required by independent claim 1, or in a capacitive touch sensor disposed behind a surface in a vehicle, as required by independent claim 28.

Lastly, the *Graham* factual inquiries provide the framework for any obviousness determination, as affirmed by the Supreme Court in the *KSR* decision and cited herein. The Patent Office has published guidelines, effective October 10, 2007, that will assist Office personnel in making a “proper determination of obviousness under 35 U.S.C. § 103.” Fed. Reg., Vol. 72, No. 195. The guidelines recognize that differences between the cited art and the claimed invention are likely to exist, and provides that “The gap between the prior art and the claimed invention may not be ‘so great as to render the [claim] nonobvious to one reasonably skilled in the art.’” *Dann v. Johnston*, 425 U.S. 219, 230, 189 USPQ 257, 261 (1976). The rejections based upon Gillespie in view of Pryor and further in view of Neuman are precisely of the nature where the gaps in the cited references are so great that one reasonably skilled in the art would view the pending claims as patentably distinct and nonobvious over these references.

Neuman fails to cure the deficiencies of Gillespie in view of Pryor in establishing a *prima facie* case of obviousness.

Therefore, the Examiner's interpretation of the cited references and the Examiner's basis of the *prima facie* case of obviousness in rejecting claims 1-7, 9-11, 13-16, 28-38 and 42 are both in error. Thus, the rejections to claims 1-7, 9-11, 13-16, 28-38 and 42 should properly be withdrawn.

II. Claims 23 and 27 (including independent claim 23) are not rendered obvious under over Gillespie in view of Pryor.

The Examiner has rejected independent claim 23 and dependent claim 27 under 35 U.S.C. § 103 over Gillespie in view of Pryor.

Claim 23 claims a method of making a touch-enabled airbag cover that requires providing an airbag cover configured for enclosing an airbag in a vehicle and for providing a

Reply Brief to Examiner's Answer

Applicant: E. Scott Hagermoser et al.

Serial No.: 10/658,490

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

finished surface, disposing a capacitive touch sensor **on a back surface of the airbag cover** opposing the finished surface, and configuring the capacitive touch sensor to **minimally interfere with airbag deployment**.

Based upon the above remarks, Appellant's position is that Gillespie modified by the disclosure of Pryor does not so much as result in a capacitive touch sensor being disposed behind an airbag cover, much less a capacitive touch sensor **on a back surface of the airbag cover** opposing a finished surface, as required by independent claim 23.

Moreover, Gillespie is silent as regards steering wheels or airbags, and Pryor teaches away from placement of a sensor near an airbag by stating "requirements" of an automobile display/touch screen include: 7. "not sacrifice airbag function-thus must not be where the airbag is, or the airbag/and screen module must be of another design (one of which is disclosed herein)." The one and only touch screen / airbag assembly as disclosed by Pryor has a touch screen 430 that is exposed for input via a pen 479.

Therefore, the Examiner's interpretation of the cited references and the Examiner's basis of the *prima facie* case of obviousness in rejecting independent claim 23 are both in error. Thus, the rejection to independent claim 23 and claims depending from independent claim 23 should properly be withdrawn.

Reply Brief to Examiner's Answer

Applicant: E. Scott Hagermoser et al.

Serial No.: 10/658,490

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

CONCLUSION

In view of the arguments stated above and in the Appeal Brief filed on December 2, 2008, Appellant asserts that a *prima facie* case of obviousness under Section 103 cannot be established in rejecting the pending claims over the cited references. Thus, it is believed that pending claims 1-7, 9-16, 23-40, and 42 recite patentable subject matter over the cited references and that all rejections to the claims have been overcome.

Appellant respectfully requests that the Board reverse the rejections to claims 1-7, 9-16, 23-40, and 42.

Any inquiry regarding this Appeal Brief to the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office should be directed to Steven Bern at Telephone No. (651) 733-2255, Facsimile No. (651) 736-3833. In addition, all correspondence should continue to be directed to the following address:

3M Innovative Properties Company
Office of Intellectual Property Counsel
P.O. Box 33427
St. Paul, MN 55133-3427

Respectfully submitted,
E. Scott Hagermoser et al.
By their attorneys,

Dated: May 1, 2009
NRB: cms

/Nick Baumann/
Nick Baumann
Reg. No. 56,161